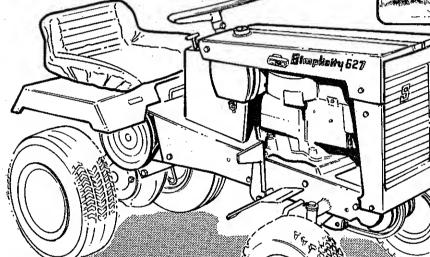
# Simplicity





Mfrs. No. 486 MANUAL START

Mfrs. No. 542
ELECTRIC START

**ATTACHMENTS** 

FRONT WEIGHT KIT REAR WEIGHT REAR WHEEL WEIGHT 42" SNOW PLOW & DOZER 40" GRADER BLADE MFR. NO. 466 MFR. NO. 300 MFR. NO. 449 MFR. NO. 299 MFR. NO. 298 YEOMAN 627



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LITHO IN U.S. A.

SIMPLICITY MANUFACTURING COMPANY

### WARRANTY

The company warrants Simplicity Products to be free from defects in material and workmanship except the company makes no warranty express or implied with respect to tires, engines and engine accessories which generally are warranted by their respective manufacturers. Any part covered by this warranty which is proven defective within one year, under normal use, from date of purchase, will be replaced free of charge, f. o. b. Port Washington, Wisconsin, provided such part is returned to factory transportation charges prepaid and is found to be defective upon examination at the factory. The company is not obligated under this warranty to bear cost of labor or delivery charges in replacement of defective parts. This warranty does not apply to any Simplicity Products altered outside of Simplicity's factory. Such replacement of defective parts shall be the exclusive remedy and in no event shall Simplicity be liable for consequential damages, EXCEPT AS SPECIFICALLY PROVIDED HEREIN, THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON ANY SIMPLICITY PRODUCT.



Should warranty service be necessary, the information below should be presented to the authorized SIMPLICITY Dealer.

Customer's Name		-	
Address		*	
Mfg. No	Serial No		
Date Purchased			
Purchased From			
Address		. I	i
Engine Model No	Serial No.	Type No	)

To obtain replacement parts from dealer, advise quantity, part number and description.



### PACKING

This tractor is delivered complete in one carton. The carton contains:

- 1 Tractor Assembly
- 1 Steering Wheel
- 1 Seat Cover Assembly
- 1 Hardware Pack

Should shortages of any of the above items occur, advise by stating packer's number listed on green packing slip, serial number of tractor, part number & description of items missing.

### ASSEMBLY

This tractor is shipped completely assembled except for the steering wheel and seat cover assembly. Position the wheel on the steering post as shown in Figure 1 and secure with the 5/16" screw and lock nut provided. Attach the seat cover to the seat pan assembly.

#### NOTE

On Electric Start Models remove hood and battery. Service battery in accordance with Battery Instructions.

### ENGINE LUBRICATION

1 ENGINE LUBRICATION Refer to the engine manufacturer's instruction manual for information concerning location of the crankcase filler plug, and the oil capacity of the crankcase.

NOTE: It is important that you pay attention to "Service Designation" stamped on the top of each can of oil you intend using in your tractor engine. Use oil labeled MS (Motor Severe), but do not use ML or MM labels as they do not contain sufficient additives for proper protection. Labels DL and DM may be used also; however, do not use a DS label oil as it is too severe in detergent quality for this application. Be sure to use a premium grade oil and change at least every 24 hours of operation.

- 2. ENGINE AIR CLEANER Refer to the engine manufacturer's instruction manual for information concerning the type and quantity of oil to be used in the air cleaner. Inspect the air cleaner element frequently to insure cleanliness, and under dusty or dirty operating conditions, check and clean daily if necessary.
- 3. ENGINE COOLING. The engine used on your tractor is an air-cooled engine and requires that the fins on the head and cylinder be kept free of heavy layers of dirt and foreign material. If the air flow is obstructed by grass, etc., piled up on the recoil starter screen, or dirt is allowed to nullify the purpose of the cooling fins on the cylinder head and cylinder, proper cooling cannot take place, and the life of the engine will be shortened.

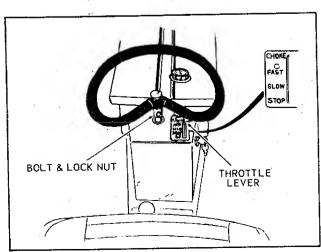


Figure 1

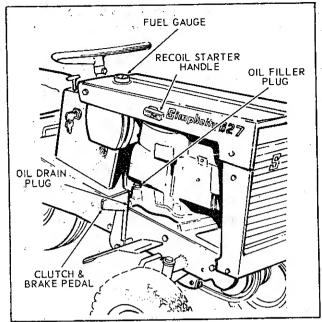


Figure 2

### TRACTOR LUBRICATION

Grease fittings are located on both front spindle housing, on the front wheels and at the pivot point under tractor frame. In normal use, these fittings (5 in all) should get two or three shots of a good grade of automotive type multi-purpose grease, every 15 to 20 hours of operation. Be sure to wipe the fittings clean before you apply the grease gun, or dirt and grit will be carried into the bearings with the application of grease.

The tractor transmission is lubricated with SAE 90 oil and is filed up to the level of the threads in the filler-plug hole, Check the transmission for oil before operating the tractor initially, and occasionally check the filler and drain plugs for tightness. Unless the transmission is disassembled or the oil seals leak, the transmission lubricant need not be replenished or replaced. Allow the tractor to sit still for a period of time before checking transmission oil level. This will allow the oil dispersed in transmission to drain down to its normal position.

Occasionally lubricate the pivots for the clutch lever and pivots for the PTO and the front axle steering links and gears. Use a regular medium weight oil for this purpose.

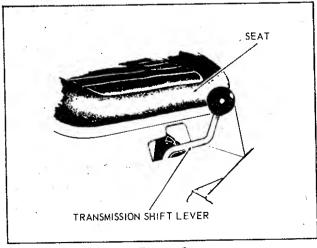
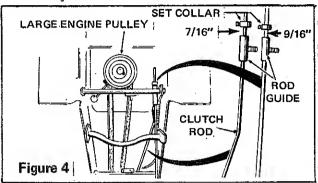


Figure 3

### BRAKE and CLUTCH ADJUSTMENT

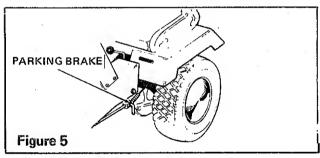
Operation of clutch and brake is regulated by clutch & brake pedal shown in Figure 2.

Depress the pedal and the clutch idler pulley is released and the brake is applied at the same time. Release the pedal and the clutch idler is engaged and the brake is released. The adjustment is regulated by positioning the set collars on the clutch and brake rods so that a clearance of 7/16'exists between the set collar and the rod guides when the clutch and brake pedal is released, as shown in Figure 4.



### PARKING BRAKE

To operate the parking brake, hold the brake pedal depressed and slide the parking brake lever all the way to the rear and turn the lever in a clockwise direction until it is tight. See Figure 5. To release the parking brake, turn the parking brake lever in a counter-clockwise direction until the brake pedal is released.



### STARTING ENGINE

The proper procedure for starting the engine is as follows:

- 1. Sit upon the tractor seat.
- 2. Depress the clutch pedal Figure 2 with the right foot.
- 3. Move the throttle lever Figure 1 to the CHOKE position.
- 4. Grasp the handle of the recoil starter Fig. 2 with the right hand and pull sharply toward you. If engine starts on first pull slowly move the choke and throttle lever to the "Run" position as the engine warms up. Should the engine fail to start on the first or second pull, move the choke and throttle lever to the "Run" position to avoid flooding the engine with fuel. When re-starting a warm engine, it should not be necessary to use the choke.

NOTE usin

On Electric Start Models follow above instructions using key instead of recoil rope. Check to insure that throttle control lever is in the CHOKE or RUN position before using key starter.

### FORWARD or REVERSE TRAVEL

Travel direction of the tractor is regulated by the position of the transmission shift lever, Figure 3. Merely depress the clutch pedal, Figure 2 with the right foot, and with the heel of your hand, move the shift lever into the desired 1st, 2nd, 3rd or reverse position. Slowly release the clutch lever and move off, regulating speed of travel by the position of the throttle lever.

### STOPPING ENGINE

When stopping engine or parking tractor, keep the transmission in gear and depress clutch pedal to a point where the brake is applied and place choke and throttle lever in the "Stop" position. Hold clutch pedal all the way in until engine stops, then release.

NOTE

On Electric Start Models tractor can be stopped by placing throttle lever in STOP position or by turning key in the OFF position.

### UNDERSIDE INSPECTION

The underside of the tractor is readily accessible in the following manner:

- 1. Drain all fuel from the fuel tank by removing the fuel line from the carburetor and draining into a suitable container.
- 2. Remove the air cleaner from the carburetor.
- 3. Place the transmission in "LO" gear to prevent the rear wheels from turning, and raise up the front end of the tractor until the tractor stands in a vertical position, resting the back edge of the seat level with the ground. With the tractor in this position, inspection of belts and linkages may be carried out with ease. While it is possible for one man to raise the tractor to this position, it obviously will be easier if two men perform this together.

### HOOD REMOVAL

To remove the tractor hood, use the following procedure:

- 1. Loosen the four screws at the sides of hood.
- 2. Push the recoil starter handle inside of the hood opening.
- Remove the hood by lifting up and forward, to clear the steering wheel. To replace the hood, reverse the order of above steps.

### BATTERY

The 12 volt battery provided in the starter kit will provide approximately 75 to 100 starts without recharging. It is recommended that the battery be recharged with the charger provided weekly.

### **CHARGER ASSEMBLY**

The Charger Assembly is provided with the starter kit. Insert the male connector into the connector located to the right of the battery. Plug the remaining end of the Charger Assembly to the standard 110 household outlet. See Figure 6.

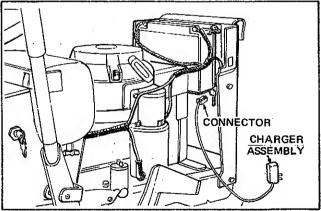
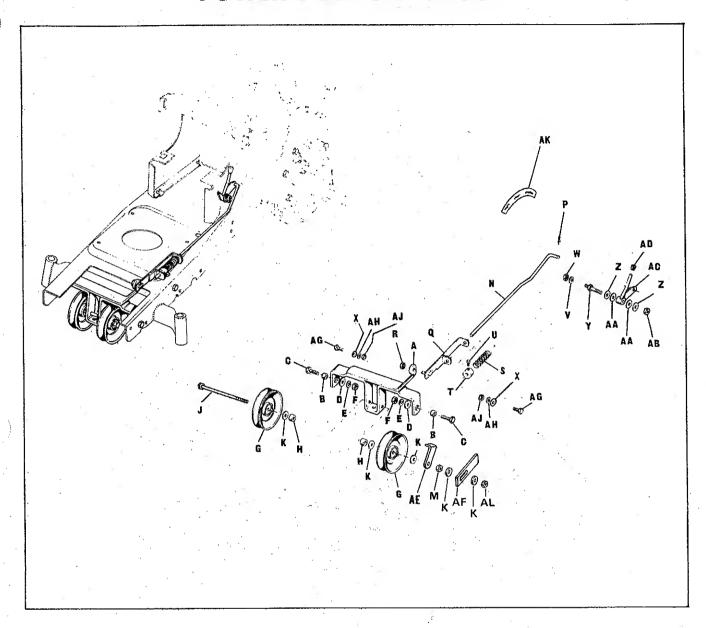


Figure 6

RECOMMENDED TIRE PRESSURES FRONT 9 Lbs. PSI

NOTE: The tractor is shipped with all tires inflated to 25 PSI. It is very important to reduce these pressures to the above recommendations before putting the tractor into operation.

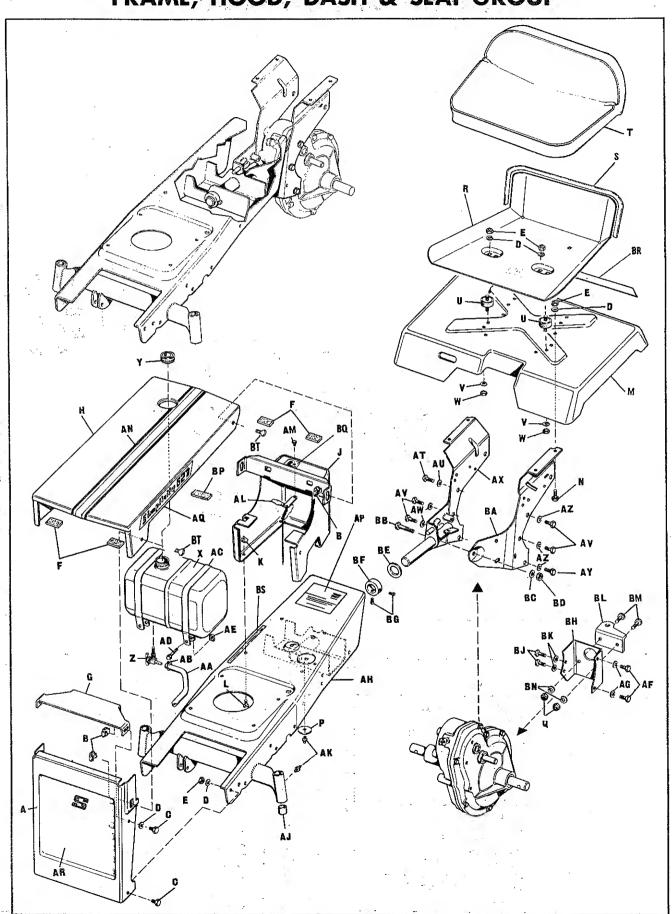
## POWER TAKE OFF GROUP



Ref. Let.	Part No.	Description
A B C D E F G H J	162030 154177 705005 719001 720002 717003 101096 154177 705066	Pulley Clevis Assembly Spacer Hex. Cap Screw, 3/8"-16 x 1" Plain Washer, 3/8" Lock Washer, 3/8" Full Hex. Nut, 3/8"-16 Pulley Spacer Hex. Cap Screw, 3/8"-16 x 4-1/2"
K L M N P Q R S	719002 720002 717013 162033 722016 162034 717511 162065	Plain Washer, 5/16" Lock Washer, 3/8" Hex Nut-Jam, 3/8"—16 P.T.O. Clutch Rod Cotter Pin, 3/32" x 3/4" Idler Clutch Rod Guide Assembly Full Lock Hex. Nut, 5/16"-18 Spring

Part No.	Description
8191022 713001 720001 717001 719002 162063 719002 159134 717525 162050 159112 162115 162119 705017 720001	Set Collar Set Screw, 1/4"-20 x 3/8" Lock Washer, 5/16" Full Hex. Nut, 5/16"-18 Plain Washer, 5/16" Stud Plain Washer, 5/16" Nylon Washer Esna Stop Nut, 5/16"-18 P.T.O. Handle Assembly Knob Belt Stop Belt Stop Hex. Cap Screw, 5/16"-18 x 3/4" Lock Washer, 5/16"
162093	Full Hex. Nut, 5/16"-18 Decal, PTO Hex Nut-Full Lock, 3/8"—16
	No.  8191022 713001 720001 717001 719002 162063 719002 159134 717525 162050 159112 162115 162119 705017 720001 717001

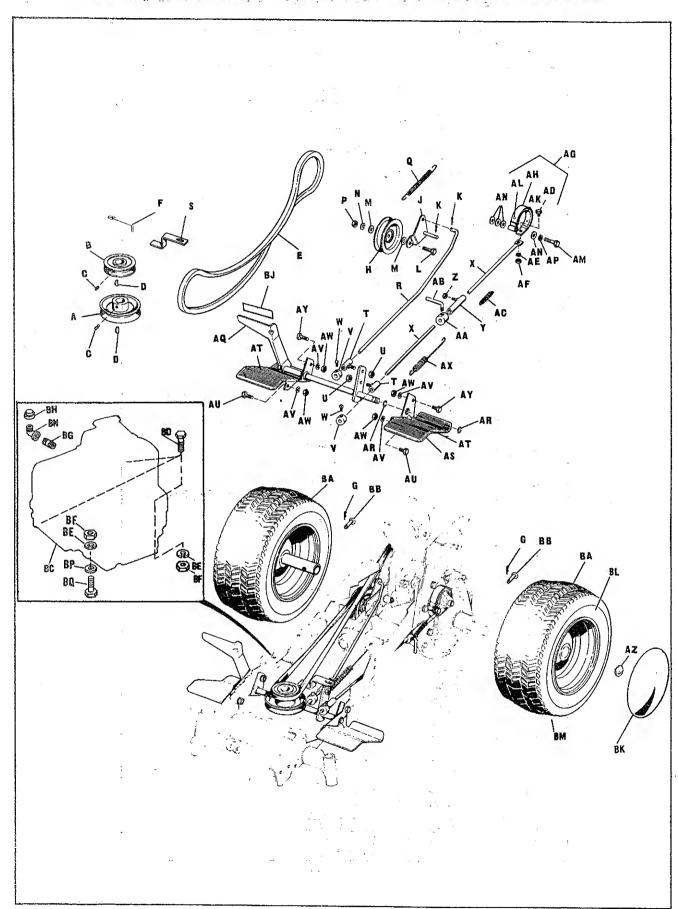
## FRAME, HOOD, DASH & SEAT GROUP



## FRAME, HOOD, DASH & SEAT GROUP

	Ref.	Part	
	Let.	No.	Description
1	Α .	162036	Grille
•	В	718041	Retainer Nut
	B C	705012	Hex. Cap Screw, 5/16"-18 x 5/8"
	Ď.	720001	Lock Washer, 5/16"
	D E F G	717001	Full Hex, Nut, 5/16"-18
	F	106582	Felt Pad
	G	162037	Grille Support
	н	162038	Hood
	J	162039	Dash Assembly
•	K	718038	Tinnerman Nut
	Î.	714020	Self Tapping Hex. Hd Screw, // 14 x 5/8"
	M	162105	Seat Support
	N	705017	Hex. Cap Screw, 5/16"-18 x 3/4" lg.
	P	· 719008 ·	Washer
	Q	717003	Full Hex. Nut, 3/8"-16
	Ř	162095	Seat Panel
	ŝ	159177	Seat Pan Tape (2 Ft. per pan)
	T	162094	Seat Pad
	υ	159085	Cushion Connector
	v	720001	Lock Washer, 5/16"
	w	717001	Full Hex. Nut, 5/16"-18
	- X	162043	Fuel Tank
	Ŷ	159135	Fuel Tank Cap
	Z	162044	Shut-off Valve
	AÃ	162059	Fuel Hose
	AA AB	154372	Hose Clamp (For Service Only)
	AC	162060	Tank Strap
	AD	200	Mach, Fillister Head Screw, 1/4"-20 x 1-3/4"
		712502	Square Nut, 1/4''-20
	AE AE	717028	Hex. Cap Screw, 5/16"-18 x 1-1/4"
	AF	705019	Lock Washer, 5/16"
	AG	720001	
	AH	162103	Frame Assembly
	AJ	154289	Bushing
	AK	727001	Grease Fitting
	AL !	162061	Choke Control
	AM	714016	Self Tapping Rec. Hex. Hd. Screw, 1/4"-20 x 1/2"
	AN	162074	Hood Strip
	AP	162109	Safety Decal
	AQ	162107	Number Decal
	AR	162077	Grille Decal
	AS	162106	Serial No. Plate*
	ΤA	705004	Hex. Cap Screw, 3/8"-16 x 3/4"
	AU	720002	Lock Washer, 3/8"
	AV	705040	Hex. Capscrew, 7/16"-14 x 3/4"
	AW	720006	Lock Washer, 7/16"
	AX	165038	Side Plate Assembly, R.H.
	AY	705031	Hex. Cap Screw, 3/8"-16 x 7/8"
	ΑZ	720002	Lock Washer, 3/8"
	BA	165040	L.H. Side Plate
• •	BB	705010	Hex. Cap Screw, 3/8"-16 x 1-3/4"
. '	BC ·	720002	Lock Washer, 3/8"
	BD	717003	Hex. Full Nut, 3/8"-16
	ΒĘ	105050	Washer
	BF	154065	Set Collar
	BG	713006	Set Screw, 5/16"-18 x 1/2"
	BH	156191	Draw Bar Bracket
	BJ	705004	Hex. Capscrew, 3/8"-16 x 3/4"
	BK ·	720002	Lock Washer, 3/8"
	BL	156192	Clip Draw Bar
ĺ	BM	705005	Hex. Capscrew, 3/8"-16 x 1"
l	BN	720002	Lock Washer, 3/8"
İ	BP	158450	Gasket, Felt
		162071	Decal, Throttle
'	BO		
<b>'</b>	BQ BR		
. '	BQ BR BS	162086 162072	Decal, Yoeman Decal, Clutch

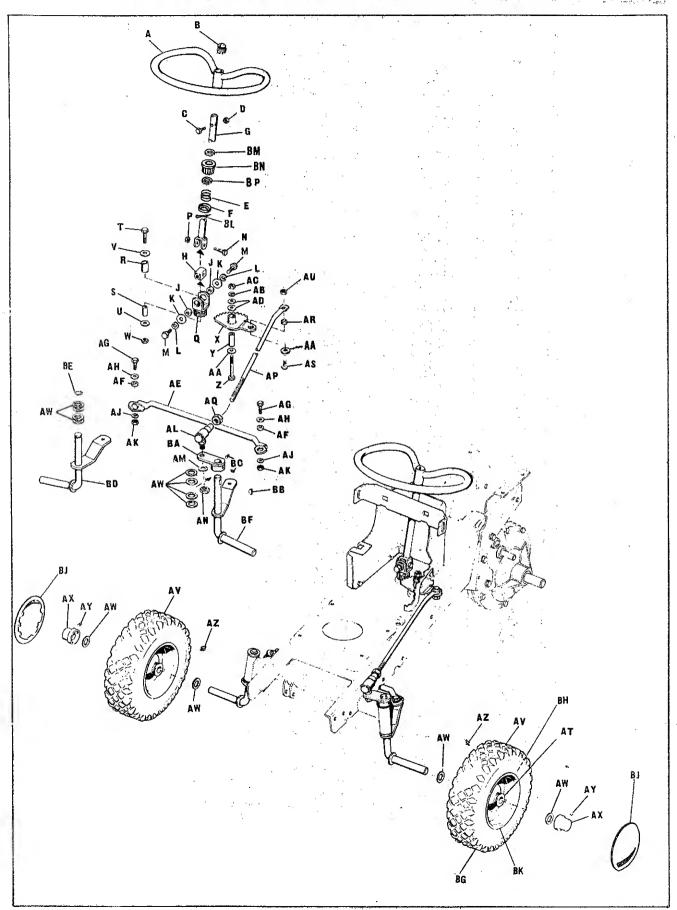
## ENGINE, PULLEY, BRAKE & CLUTCH GROUP



## ENGINE, PULLEY, BRAKE & CLUTCH GROUP PARTS LIST

Ref. Let.	Part No.	Description
A	156111	Large Engine Pulley
B	162049	Small Engine Pulley
l c	713501	Set Screw, 5/16"-18 x 1/2"
D		Kev
1 1	154096	"V" Belt, Drive
E	162081	D 3. O. S.
F	8081035	Belt Stop, 3/16" x 3/4" x 4-5/8"
G	722009	Cotter Pin
H	106716	Idler Pulley
J	162021	Pulley Bracket Assembly
K	722009	Cotter Pin, 1/8" x 3/4"
L	705016	Hex. Cap Screw, 3/8"-16 x 1-1/4"
M	719002	Plain Washer, 5/16"
N	720002	Lock Washer, 3/8"
P	717003 .	Full Hex. Nut, 3/8"-16
Q	165068	Return Spring
R	163002	Clutch Rod
S	156331	Stop
T	156303	Rod Guide Assembly
Ū	717511	Full Lock Hex. Nut, 5/16"-18
v	8191022	Set Collar
W	713001	Set Screw, 1/4"-20 x 3/8"
X	162092	Brake Rod,
Ÿ	156304	Rod Guide Assembly
ż	717513	Full Lock Hex. Nut, 1/4"-20
AÃ	157087	Parking Brake Collar
AB	157088	Parking Brake Lock
AC .	121037	Spring
	715031	Hex. Cap Screw, 1/4"-20 x 1/2"
AD		
AE	720003	Lock Washer, 1/4"
AF	717005	Full Hex. Nut, 1/4"-20
AG	156134	Brake Band Assembly
AH	156135	Brake Band
AK	156136	Brake Lining
AL	724502	Tubular Brass Rivit
[ AM		Hex. Cap Screw, 3/8"·16 x 1-1/2" Plain Washer, 5/16"
AN	719002	Plain Washer, 5/16"
· AP	720002	Lock Washer, 3/8"
AQ	162024	Clutch Shaft Assembly
AR	118240	Snap Ring
AS	162029	L.H. Foot Rest
AT	162054	Foot Rest Cover
AU	705004	Hex. Cap Screw, 3/8"-16 x 3/4"
1 AV	720002 ~	Lock Washer, 3/8"
AW	717003	Full Hex. Nut, 3/8"-16
AX	159181	Spring
AY	705016	Hex. Capscrew, 3/8"-16 x 1-1/4"
AZ	121342	Plug Button
BA	159096	Wheel & Tire
BB	118053	n:
BC	110000	Engine
BD	715079	Hex. Capscrew, 5/16"-18 x 1-1/2"
BE	720001	Lock Washer, 5/16"
I		Hex. Nut. 5/16"-18
BF BG	717001	Nipple, 3/8" Std. x 1"
		Cap, 3/8" Std.
BH	726501	
BJ	162098	Pedal Pad
BK	156211	Hub Cap, Rear (For Service Only)
BL	159155	Wheel
BM	159156	Tire
BN 4 a.	728003	Street Elbow 45
BO	705036	Hex. Capscrew, 5/16."-18 x 2-1/2"
BP	719006	Washer
BQ	705018	Hex Capscrew, 5/16"-18 x 1-1/2"
	L	

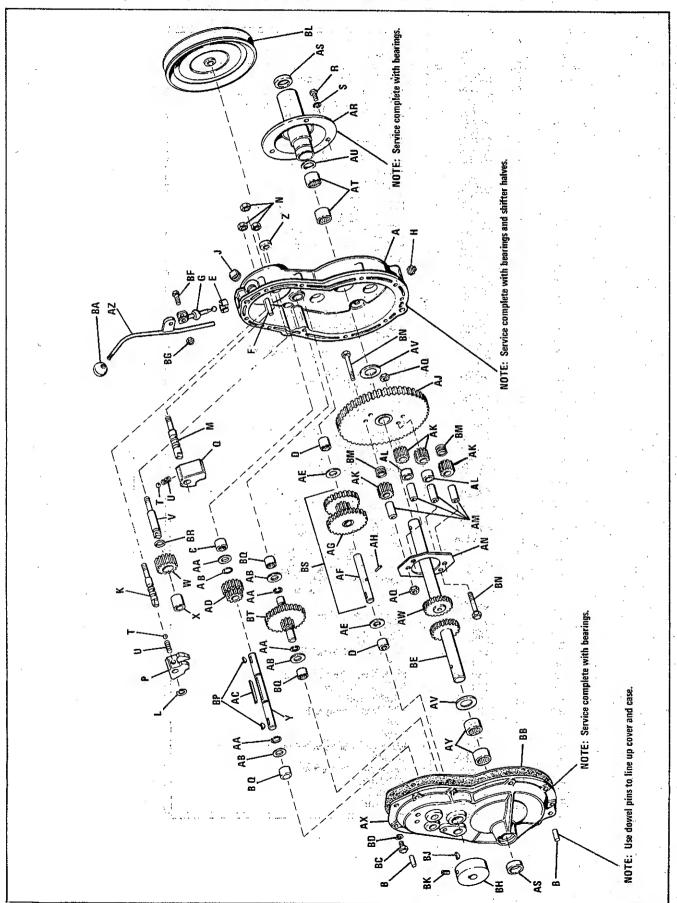
## STEERING & FRONT WHEEL GROUP



## STEERING & FRONT WHEEL GROUP PARTS LIST

Ref. Let.	Part No,	Description
A	156318	Steering Wheel Assembly
В	156279	Flug Button
C	705019	Hex. Cap Screw, 5/16"-18 x 1-1/4"
D	717511	Full Lock Hex. Nut, 5/16"-18
E	154398	Spring Spring Cup
F	154399	Steering Shaft Assembly
G H	156029 154153	Universal Joint Pin
h .	153081	Spacer
J K	· ·	Plain Washer, 3/8"
L	719001 720002	Lock Washer, 3/8"
M.	715030	Hex. Cap Screw, 3/8"-16 x 3/4"
N N	715036	Hex. Cap Screw
P	717511	Full Lock Hex. Nut, 5/16"-18
	156027	Fork & Pinion Assembly
Q	156064	Bushing
R S	8161218	Spacer
Ť	715075	Hex. Cap Screw, 3/8"-16 x 1-1/2"
ΰ.	719002	Plain Washer, 5/16"
V	156065	Plain Washer
w	717524	Jam Lock Hex, Nut, 3/8"-16
x x	156066	Steering Gear Assembly
Ŷ	8061058	Spacer
Z	715043	Hex. Cap Screw, 3/8"-16 x 2-1/2"
ΑÃ	719001	Plain Washer, 3/8"
AB	720002	Lock Washer, 3/8"
AC	717003	Full Hex. Nut, 3/8"-16
AD	8161199	Washer
AE	162013	Drag Link Assembly
AF	154177	Spacer .
AG	162053	Special Screw, 3/8"-16 x 1-1/4"
AH	719001	Plain Washer, 3/8"
AJ	720002	Lock Washer, 3/8"
AK	717003	Full Hex. Nut, 3/8"-16
AL	154301	Ball Joint
AM	720004	Lock Washer, 1/2"
AN	717008	Full Hex, Nut, 1/2"-20
AP	162045	Tie Rod
AQ	717016	Jam Hex. Nut, 1/2"-20
AR	121349	Spacer
AS	705005	Hex. Cap Screw, 3/8"-16 x 1"
AT	156316	Bearing (For Service Only)
AU	717510	Full Lock Hex. Nut, 3/8"-16
ÄV	156179	Wheel & Tire Assembly
AW	108181	Washer
AX	156183	Hub Cap Assembly
AY	713503	Set Screw
AZ	727001	Grease Fitting
BA	156007	Steering Lever Assembly
BB	725504	Key
BC	713006	Set Screw, 5/16"-18 x 1/2".
BD	162011	Spindle Assembly
BE	157286	Retainer Ring
BF	162009	Spindle Assembly L.H.
: BG	156181	Tire
BH	156182	Tube
. BJ	156210	Hub Cap, (For Service Only)
	156180	Wheel
BK	130100	
	722003	Cotter Pin 3/16 x 11/4
BK - BL BM	722003 1 <b>57241</b>	Cotter Pin 3/16 x 1¼ Snap Ring
BK - BL	722003	Cotter Pin 3/16 x 11/4

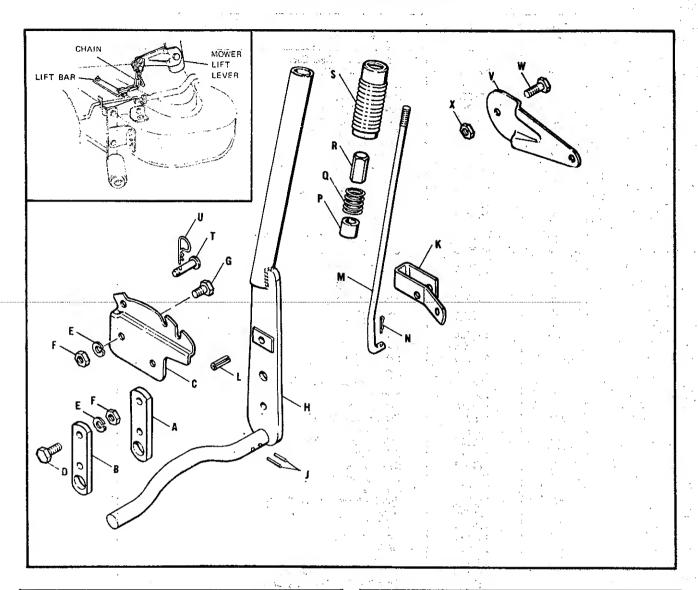
## TRANSMISSION



### TRANSMISSION

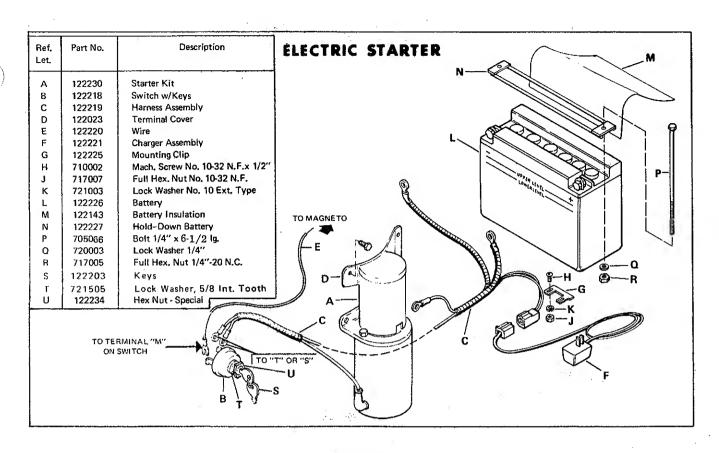
Ref. Let.	Part No.	Description	• ()
171			
A 4	165003	Sub Assembly Gear Case	
B C	723007	Roll Pin, 3/8" dia.	
C	156072	Roller Bearing	
D	156073	Roller Bearing	
Ē.	101042	: Half Ball Bushing	
E F			
F	156308	Sub Assembly Roll Pin	
G H	156031	Shift Rod Assembly	
н	726003	Pipe Plug, 3/8"	
j	726252	Pipe Plug	
K	165004	Rev. Shift Shaft	
L	8061048	Retainer Ring	
M	156078	Hi-Lo Shift Shaft	
		Full Hex. Nut. 7/16"-14	
N	717022		
P	156079	Rev. Shift Fork	
Q	156080	Shift I & II Fork	
Ř	705031	Hex. Cap Screw, 3/8"-16 x 7/8"	
Λ.			
S	720002	Lock Washer, 3/8"	
T	154262	Shift Lock Ball	-
บิ	154323	Spring	
		Rev. Pinion Shaft	• •
V	165005		
W	165007	Reverse Pinion	
X	156082	Roller Bearing	4.5
Y	165008	Pulley Shaft	
			·
Z	156084	: Oil Seal	
AA	156085	Washer	•
AB .	8061048	Retainer Ring	
AC	156086	Key	1
AD	156087	Hi - Lo Pinion Assembly	
AE	156089	Washer	
AF	165010	Brake Shaft	£ *
AG	165011	Cluster Gear Assembly	_ · · · · ·
AH	156292	Dowel Pin	Programme and the second
AJ		Drive Gear Assembly	16.4
	156094	•	· · · · · · · · · · · · · · · · · · ·
AK	121311	Diff. Pinion	m m
AL	121084	Diff. Spacer	
AM	121083	Diff. Pinion Spindle	14
	156002	Diff. Plate	<b>.</b>
AN			
AQ	717510	Full Lock Hex. Nut, 3/8"-16	
AR	156096	Axle Housing Assembly	*.
AS	118118	Oil Seal	
ΑT	105195	Roller Bearing	
AU	156099	Oil Seal	
AV	105083	Washer	
AW	156100	R.H. Axle Shaft Assembly	*
	1		
AX	165018	Gear Case Sub Assembly Cover	
AY	105195	Roller Bearing	
AZ	165063	Shift Lever Assembly	
			* '
BA	8021050	Ball	
BB	156103	Case Gasket	
BC	705019	Hex. Cap Screw, 5/16"-18 x 1-1/4"	
		Look Washen E/14"	
BD	720001	Lock Washer, 5/16"	
BE	156104	L. H. Axle Shaft Assembly	
BF	705030	Hex. Capscrew, 1/4"-20 x 3/4"	
BG	717513	Full Hex. Nut. 1/4"-20	
		· ' '	
BH	165067	Brake Drum	and a section of
ВĴ	725505	Key	
BK	713503	Set Screw	**
			•
BL	156119	Pulley	
BM	162085	Spring	
	705014	Hex. Cap Screw, 3/8"-16 x 2-1/2"	
RN	B C		
BN	725504	Key	
BP	A	Roller Bearing	
	156102	ronci bearing	
BP BQ			
BP BQ BR	165006	"O" Ring	
BP BQ BR BS	165006 165009	"O" Ring Shaft and Gear Assembly	
BP BQ BR	165006	"O" Ring	

## LIFT LEVER GROUP

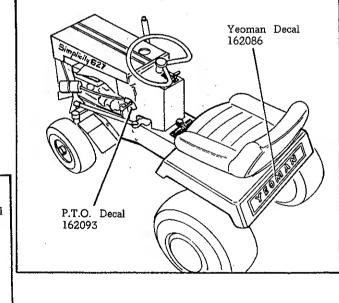


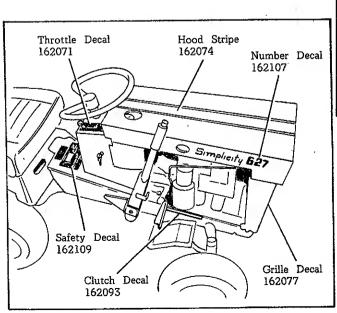
Ref. Let.	Part No.	Description
A B C D E F G H J K L M N P Q R S	162069 162070 162068 705005 720002 717003 705006 162066 723011 154224 723007 165077 722001 154226 152006 154227 156209	R.H. Bearing Bar L.H. Bearing Bar Lift Lever Quadrant Hex. Cap Screw, 3/8"-16 x 1" Lock Washer, 3/8" Hex. Nut, Full, 3/8"-16 Hex. Cap Screw, 3/8"-16 x 3/4" Lift Lever Assembly Roll Pin 3/16" dia. x 1" Lift Lever Latch Roll Pin 3/3" dia. x 1" Lift Lever Latch Rod Cotter Pin, 3/32" dia. x 3/4" lg. Spacer Spring Thumb Button Handle Grip

Ref. Let.	Part No.	Description	0
T U V W X	153058 8161045 108385 705031 717510	Pin Spring Clip Mower Lift Lever Hex. Cap Screw, 3/8"-16 x 7/8" Hex. Nut Full Lock, 3/8"-16	

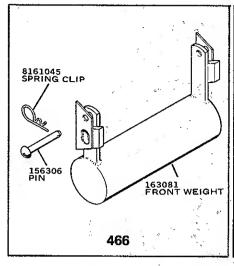


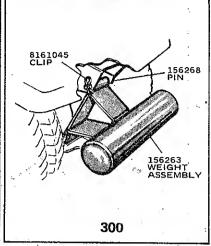
### **DECALS**

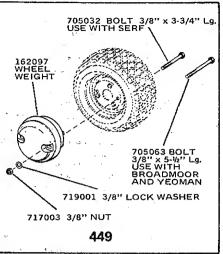


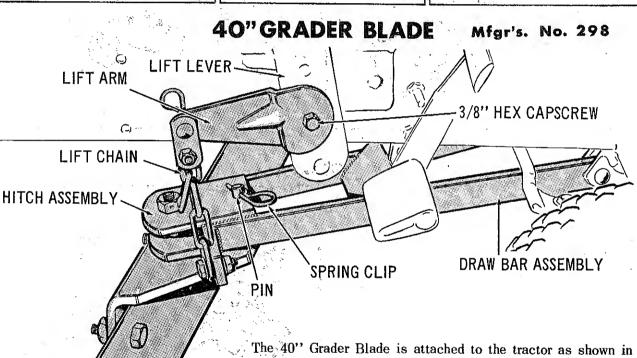


### WEIGHTS





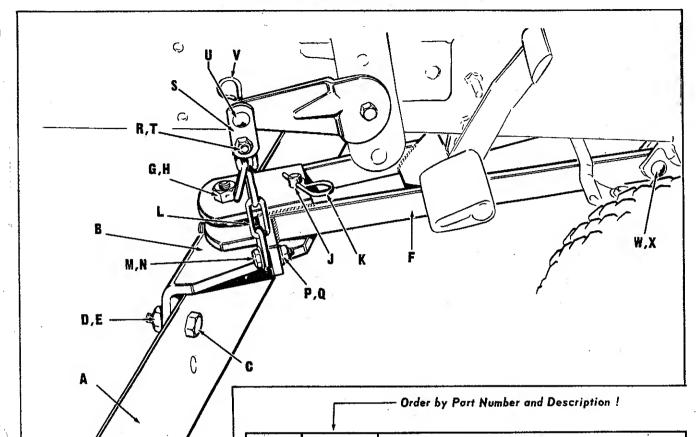




The 40" Grader Blade is attached to the tractor as shown in the above illustration by following the sequence of steps outlined below.

- Position the grader blade under the tractor so that the draw bar assembly may be connected to the front hitch brackets of the tractor. Secure in place with 2 pins and spring clips.
- Attach the lift lever to the lift arm of the tractor as shown. Fasten securely with a 3/8" hex head capscrew and lock nut.
- 3. Attach the lift chain and links to the lift lever with a pin and spring clip so that the blade can be lifted high enough to clear the ground when transporting from one location to another.
- 4. When desired, the blade may be angled to the left or right by removing the pin and spring clip from the center hole in the hitch assembly. Lock the blade in desired position by replacing the pin and spring clip when the alternate holes in the hitch assembly line up with the hole in the draw bar.

### **40"GRADER BLADE**

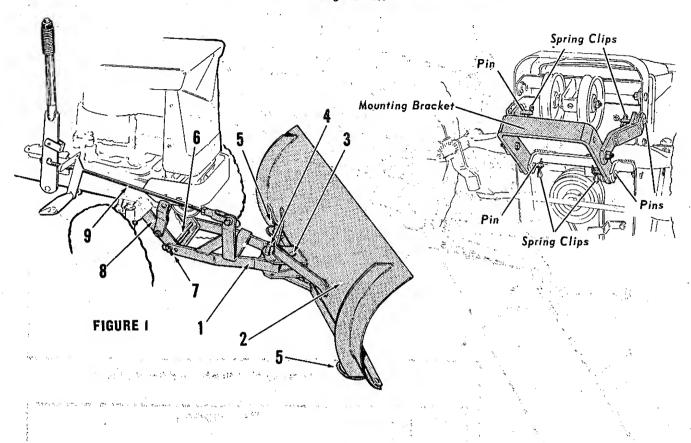


Ref. Letter	Part No.	Description
A B C D	107080 107081 705055 720005	Grader Blade, 40" Bracket Hex Capscrew, 5/8"-11 x 2" Lg. Lock Washer, 5/8"
F	717004	Hav Nut Full 5/8"-11

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A B C D E F G H J K L M N P Q R S T U V W X	107080 107081 705055 720005 717004 107082 705056 717522 8181008 8021024 107031 705016 719001 720002 717003 715005 108199 717510 153058 8161045 118053 8161045	Grader Blade, 40" Bracket Hex Capscrew, 5/8"-11 x 2" Lg. Lock Washer, 5/8" Hex Nut, Full, 5/8"-11 Pull Bar Assembly Hex Capscrew, 5/8"-11 x 3" Lg. Hex Lock Nut, Full, 5/8"-11 Pin Spring Clip Chain Hex Capscrew, 3/8"-16 x 1-1/4" Lg. Plain Washer, 3/8" Lock Washer, 3/8" Hex Nut, Full, 3/8"-16 Hex Capscrew, 3/8"-16 x 1" Lg. Link Hex Lock Nut, Full, 3/8"-16 Pin Spring Clip Pin Spring Clip
1	1	
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### **42" SNOW PLOW & DOZER**

Mfgrs. No. 299



### PACKING

The 42" snow plow and dozer comes packed complete in one bundle.

### **ASSEMBLY**

Refer to Figure 1. Attach the push bar (1) to the blade (2), using a king pin (3) and install a cotter pin through the king pin. Install the pivot pin (4) through the blade assembly bracket and the push bar.

### ATTACHMENT

To attach the 42" snow plow and dozer to the tractor, first attach the mounting bracket to the underside of the tractor as shown in Figure 2. Install the pins at the rear mounting holes first, and secure with spring clips. If required, the arms may be loosened and repositioned to align the mounting holes in the arms and on the tractor.

Connect the push bar (1) to the mounting bracket (8), using the long pin (6) and the spring clips (7).

Connect the lift rod (9) to the lift lever of the tractor as shown, using a spring clip. Attach the clevis end of the lift rod to the upright arm on the push bar assembly, using a pin and spring clip.

The shoe assemblies (5) are mounted to the blade using 3/8" carriage bolts, lockwashers, and nuts.

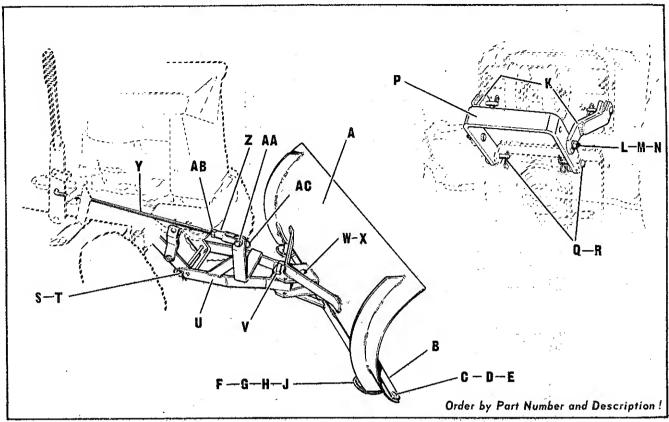
### OPERATION

Alternate holes are provided to permit adjustment of the shoe assemblies for raising or lowering the blade when cleaning gravel drives or walks. When cleaning concrete, it is desirable to allow the blade to scrape the surface.

The angle of the blade is adjustable to permit plowing to the left or right by moving the pivot pin to the desired hole in the blade mounting bracket.

When using this equipment, it is recommended that chains be installed on the wheels. Loose mounting of the chains will make them self—cleaning.

### 42" SNOW PLOW & DOZER



Reference Letter	Part No.	Description
A	107047	Blade Assembly, 42"
В	107045	Wear Plate
C	702003	Carriage Bolt, 3/8"-16 x 3/4"
D	720002	Lock Washer, 3/8"
E	717003	Hex Nut, Full, 3/8"-16
F	107024	Shoe Assembly
G	702002	Carriage Bolt, 3/8"-16 x 1"
Н	720002	Lock Washer, 3/8"
J	717003	Hex Nut, Full, 3/8"-16
K	107072	Support Arm Assembly
L	705016	Hex Capscrew, 3/8"-16 x 14"
M	720002	Lock Washer, 3/8"
N	717003	Hex Nut, Full, 3/8"-16
P	107074	Push Frame
Q	118053	Pin
R	8161045	Spring Clip
S	107089	Pivot Rod
T	8161045	Spring Clip
U	107075	Push Bar Assembly
V	8181033	Pivot Pin
W	8181008	King Pin
X	8161045	Spring Clip
Y	106812	Lift Rod
Z	157631	Adjusting Yoke
AA .	154305	Yoke Pin
AB	717008	Hex Nut, Full, 1/2"-20 NF
AC	8161045	Spring Clip

### BATTERY INSTRUCTIONS

With proper care this battery should give the long service life built into it.

A battery which does not function properly is not necessarily worn out or defective. It may only need a good recharge. Therefore, if battery trouble is uspected, a full recharge and test by a competent battery man is recommended.

### PUTTING DRY-CHARGED BATTERIES IN SERVICE

Remove wicks or tape covering from vent hole in filler caps. Make sure vent holes are open so battery gases produced when battery is charging can escape. If necessary, run a fine wire in vent hole to be sure it is open and free of all obstructions.

Fill battery with 1.265 specific gravity electrolyte or acid to proper level or 3/16 inch above plates and separators assuming room, battery, and electrolyte temperature is  $70^{\circ}$  -  $100^{\circ}$  Fahrenheit.

Allow battery to set for 20 minutes. Battery can then be installed but to obtain best results and maximum capacity, place battery on charge after the 20-minute setting period at 6 amperes until gravity reading is 1.265 - 1.275. If room, battery and electrolyte temperatures are below normal a longer charging period will be mandatory to bring the specific gravity up to 1.265 - 1.275.

#### WARNING

Under no conditions should battery be filled more than 3/16" over the plates. We cannot be responsible for damages if this warning is not observed.

### CARE IN SERVICE

A hydrometer test of the battery solution should be made monthly. If the specific gravity tests 1.225 or less, the battery should be removed and thoroughly recharged. At the same time the solution level should be examined and distilled water added when necessary to retain the level of 3/16" over the plates. When necessary to add distilled water it should always be done just prior to recharging to mix the added water thoroughy into the solution.

When recharging is necessary and user does not have his own charging equipment, he should request service station to slow charge the battery at a rate of 4 to 6 amoress.

Any collection of grease or any other substance should be kept removed from the top of the battery and the top kept dry and clean at all times. The battery should be kept snug in its cradle and not permitted to get loose. If removed for charging, it should be fastened back in snugly enough to prevent any movement when in use. Vent caps should be kept tight and the small vent holes in top or side of cap be kept open at all times to permit escapage of gases formed in the battery. Care should be exercises not to overfill the battery at any time and to always retain 3/16" of solution above the plates.

#### WINTER CARE

If battery will not be used during the winter months it should be removed and stored in a cool, dry place. Any collection of grease or other substance should be removed from the top of the battery.

The battery must be recharged monthly or whenever the hydrometer reads less than 1.225. Before reinstalling the battery in the spring, it should always be given a thorough recharge.